

**00453 Cross-cultural Adaptation of the Connective Tissue Disease Screening Questionnaire and Development of a Chinese Version in a Multi-ethnic Urban Asian Population**

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**Aims:** To cross-culturally adapt the Connective Tissue Disease Screening Questionnaire (CSQ) English version and develop a Chinese version for use in a multi-ethnic urban Asian population in Singapore.

**Methodology:** A panel of accredited rheumatologists fluent in English and/ or Chinese was convened to evaluate the face validity of the original CSQ. Consenting participants newly referred to a rheumatology specialist outpatient clinic for evaluation of possible connective tissue diseases were studied. Cognitive debriefings using the original CSQ were conducted with English-speaking participants, with modifications made based on their input and in discussion with an expert panel and the CSQ developers. Forward and back translations of the adapted English version were reviewed by the expert panel and CSQ developers. The common translation produced was tested in cognitive debriefings with Chinese-speaking participants. Both adapted English and Chinese versions were pilot tested in a separate group of newly referred patients.

**Result:** Face validity of the original CSQ was confirmed by the expert panel. A total of 30 and 15 participants were recruited for English and Chinese cognitive debriefings respectively. Chinese-speaking participants were relatively older than English-speaking participants. Alternative terms, explanatory notes and a photograph of a hand were added to difficult medical terms to improve the understandability of the original CSQ. A further explanatory note was added to one difficult item and English medical terms were retained in the Chinese translation. Pilot testing of the adapted CSQ questionnaires was performed on 116 participants, which exhibited an overall sensitivity of 71% and specificity of 58%.

**Conclusion:** The CSQ was cross-culturally adapted into Singapore English and Singapore Chinese. The adapted versions demonstrated comparable validity to the original CSQ in the pilot testing and hence are promising tools for facilitating early identification of connective tissue diseases in Singapore.